

B. Sc. MEDICAL TECHNOLOGY (RADIOGRAPHY & IMAGING) (BRIT)
SEMESTER -VI EXAMINATION, SEPTEMBER- 2026

RADIOLOGICAL PROCEDURE -II

[Time allotted: Three Hours]

[Max Marks: 100]

Note: Read all the instructions carefully

Answer all questions in serial order. Draw suitable diagrams wherever necessary

Q. 1. Objective type questions: (Attempt All)

(10 x 02 = 20)

(Very short/ short answer/ MCQ/ One liners/ Fill in the blanks/ True/False)

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| <p>a. Which guidewire tip is commonly preferred for safe vascular navigation? PO2CO4</p> <p>i. Cutting tip</p> <p>ii. Sharp tip</p> <p>iii. J-tip</p> <p>iv. Flat tip</p> <p>b. DSA stands for:</p> <p>i. Digital Scanning Angiography</p> <p>ii. Doppler Subtraction Angiography</p> <p>iii. Digital Subtraction Angiography</p> <p>iv. Digital Signal Angiography</p> <p>c. Which of the following arteries is NOT part of the arterial supply of the upper limb?</p> <p>i. axillary artery</p> <p>ii. ulnar artery</p> <p>iii. femoral artery</p> <p>iv. brachial artery</p> <p>f. Which test is done to check kidney function before contrast study?</p> <p>g. Barium sulfate is water-soluble. (True/False)</p> <p>h. Write full form of DCG.</p> <p>i. Which contrast is used in MRI?</p> <p>j. Name one obsolete radiographic procedure.</p> | <p>d. The Seldinger technique primarily involves:</p> <p>i. Direct injection into the artery</p> <p>ii. Needle puncture followed by guidewire and catheter insertion</p> <p>iii. Surgical exposure of the artery</p> <p>iv. Intramuscular contrast injection</p> <p>e. The main function of a contrast injector in angiography is to:</p> <p>i. Remove thrombus</p> <p>ii. Deliver contrast at controlled pressure and flow rate</p> <p>iii. Sterilize the catheter</p> <p>iv. Measure radiation dose</p> |
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Q. 2. Short notes/ Short answer type questions (Attempt any Five)

(05 x 04 = 20)

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| a. Mention advantages of biplane DSA systems. | PO2CO4 |
| b. DSA | PO1CO3 |
| c. Arthrography | PO3CO4 |
| d. List the indications of pulmonary arteriography. | PO2CO2 |
| e. Write a short note on vascular sheaths and their uses. | PO3CO3 |
| f. Myelography | PO2CO4 |
| g. Lithotomy position | PO2CO3 |

Q. 3. Structured questions (Attempt any Three)

(03 x 10 = 30)

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| a. Head and Neck Angiography: Describe indications, vascular access sites, catheter positioning, common angiographic projections and complications. | PO2CO3 |
| b. Discuss role of radiographer in interventional radiography. | PO1PO2CO4 |
| c. Indications & methods of CT guided biopsy. | PO2CO4 |
| d. Percutaneous Catheterization: Explain the steps of percutaneous arterial catheterization using the Seldinger technique. Add indications and complications. | PO2CO4 |

Q. 4. Long Answer/ Essay type questions (Attempt any Two)

(02 x 15 = 30)

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| a. Pulmonary Arteriography: Describe indications, contraindications, and patient preparation vascular access, and catheterization technique, contrast administration, imaging technique, normal angiographic anatomy and complications. | PO2CO4 |
| b. Write in detail about peripheral venography-upper and lower limb | PO2CO4 |
| c. Renal Angiography: Describe indications, patient preparation, vascular access, catheter selection, technique of renal angiography, imaging findings, complications and post-procedure management. | PO2CO4 |